STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE GOVERNOR



L. L. Bean, Inc.
Desert Road Campus
Cumberland County
Freeport, Maine
A-764-71-F-M

Departmental
Findings of Fact and Order
Air Emission License
After the Fact Amendment #1

FINDINGS OF FACT

After review of the air emissions license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

- L. L. Bean, Inc. (L. L. Bean) was issued Air Emission License A-764-71-E-R/A on September 22, 2010, licensing the operation of emission sources associated with their Desert Road Campus distribution and order fulfillment center in Freeport, Maine.
- L. L. Bean has requested a minor revision to their license in order to include a generator which was installed in 2007 but was inadvertently overlooked in the licensing process in 2010.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

<u>Equipment</u>	<u>kW (hp)</u>	Firing Rate (scf/hr)	Fuel Type	Date of Installation
Generator OFC-GEN-EXP07-06	90 (120.7 hp)	451	Natural gas	2007

C. Application Classification

This amendment will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined. Therefore, this modification is determined to be a minor revision and has been processed as such.

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II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Emergency Generator OFC-GEN-EXP07-06

The OFC-GEN-EXP07-06 emergency generator was installed in the Desert Road Order Fulfillment Center (OFC) Expansion in 2007. This unit is rated at approximately 0.5 MMBtu/hour (90 kW) firing natural gas at a maximum rate of 451 cubic feet/hour.

1. BACT/BPT Findings

The BACT/BPT emission limits for the generator are based on the following:

PM	0.01 lb/MMBtu,	AP-42, Section 3.2-2 (dated 7/2000)
PM_{10} –	0.01 lb/MMBtu,	AP-42, Section 3.2-2 (dated 7/2000)
SO_2 –	0.000588 lb/MMBtu,	AP-42, Section 3.2-2 (dated 7/2000)
NO_X –	4.08 lb/MMBtu,	AP-42, Section 3.2-2 (dated 7/2000)
CO –	0.317 lb/MMBtu,	AP-42, Section 3.2-2 (dated 7/2000)
VOC –	0.118 lb/MMBtu,	AP-42, Section 3.2-2 (dated 7/2000)
Opacity –	06-096 CMR 101, BA	CT/BPT

The BACT/BPT emission limits for the generator are the following:

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator OFC-GEN-EXP07-06 (0.5 MMBtu/hr) natural gas	0.01	0.01	negligible	2.04	0.16	0.06

Visible emissions from the natural gas fired emergency generator shall not exceed an opacity of 10% on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

The emergency generator shall be limited to 500 hours of operation a year, based on a calendar year. L. L. Bean shall keep records of the hours of

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operation for the unit. The facility is required to install and operate a non-resettable hour meter on the emergency generator.

Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

2. New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart JJJJ

This emergency generator is not subject to the NSPS requirements of 40 CFR Part 60, Subpart JJJJ. According to § 60.4230 of this Subpart, the provisions of the Subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. Paragraph (4)(iv) of the section states that Subpart JJJJ is applicable to owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP). [Note: For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. § 60.4230(a)]

This engine is greater than 25 HP, and construction commenced after June 12, 2006. However, the engine was manufactured *before* January 1, 2009. Thus, his unit does not fall into any of the categories identified in Subpart JJJJ to which the requirements of the Subpart are applicable.

3. National Emission Standards for Hazardous Air Pollutants (NESHAPs) 40 CFR Part 63, Subpart ZZZZ

The federal regulation 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines is not applicable to the emergency generator listed above. The unit is considered an existing, emergency stationary reciprocating internal combustion engine at an area HAP source; however, the unit is considered exempt from the requirements of Subpart ZZZZ since it is categorized as a commercial emergency engine and it does not operate or is not contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii).

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Operation of Emergency Generator OFC-GEN-EXP07-06 such that it exceeds 15 hours per calendar year of operation in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), would cause the generator to be subject to 40 CFR Part 63, Subpart ZZZZ and require compliance with all applicable requirements contained therein.

C. Annual Emissions

L. L. Bean shall be restricted to the following annual emissions from Generator OFC-GEN-EXP07-06, on a calendar year basis:

Total Licensed Annual Emissions from the Additional Unit Tons/year

(used to calculate the annual license fee)

	<u>PM</u>	<u>PM₁₀</u>	<u>SO₂</u>	NO _x	<u>CO</u>	· <u>VOC</u>
Generator OFC-GEN-EXP07-06	0.003	0.003	negligible	0.51	0.04	0.015

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment.
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-764-71-F-M subject to the conditions found in Air Emission License A-764-71-E-R/A, the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

(23) Emergency Generator OFC-GEN-EXP07-06

A. The generator is limited to 500 hours per year total operation, based on a calendar year. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 115, BACT/BPT]

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- B. A non-resettable hour meter shall be installed and operated on Emergency Generator OFC-GEN-EXP07-06. [06-096 CMR 115, BACT/BPT]
- C. Emissions from Generator OFC-GEN-EXP07-06 shall not exceed the following [06-096 CMR 115, BACT/BPT]:

Pollutant:	<u>PM</u>	$\underline{\mathbf{PM}}_{10}$	\underline{SO}_2	\underline{NO}_{x}	<u>CO</u>	<u>VOC</u>
lb/hour:	0.01	0.01	negligible	2.04	0.16	0.06

- D. Visible emissions from the natural gas fired generator shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 115, BACT]
- E. This emergency generator is only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. This emergency generator is not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity. [06-096 CMR 115, BACT/BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS

25 DAY OF April

, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mare Illin Kollul (Me PATRICIA W. AHO, COMMISSIONER

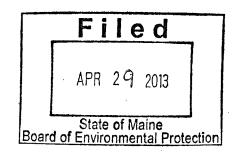
The term of this amendment shall be concurrent with the term of Air Emission License A-764-71-E-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>March 13, 2013</u> Date of application acceptance: March 18, 2013

Date filed with the Board of Environmental Protection:

This Order prepared by Jane Gilbert, Bureau of Air Quality.



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